

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	7	((("5984695") or ("3105492") or ("5192910")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/06/24 09:42
L2	2	knapp\$.in. and pleat\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 09:44
L3	51	knapp\$.in. and graft	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 09:45
L4	13	knapp\$.in. and "623"/\$.\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 10:32
L5	2	("6652567").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/06/24 13:17
L6	103	graft with slits!	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 10:46
L7	34	("5104399"   "5209731"   "5256150"   "5395349"   "5397345"   "5419324"   "5484418"   "5489295"   "5609625"   "5628783"   "5653697"   "5662700"   "5669932"   "5669936"   "5676697"   "5693083"   "5697971"   "5723004"   "5728150"   "5749920"   "5755735"   "5769885"   "5782909"   "5800518"   "5824039"   "5824044"   "5855600"   "5910144"   "5935122"   "5957973"   "5961548"   "5984955"   "6210429"   "6398803").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/06/24 11:05

L8	77	("4324574"   "4647416"   "4776337"   "4954126"   "5078736"   "5122154"   "5123917"   "5139480"   "5158548"   "5211658"   "5234456"   "5236447"   "5242399"   "5258027"   "5282823"   "5344426"   "5354309"   "5383928"   "5384019"   "5389106"   "5395390"   "5421955"   "5437083"   "5443496"   "5458615"   "5474563"   "5507767"   "5507768"   "5514154"   "5522881"   "5527353"   "5527355"   "5546646"   "5549663"   "5554181"   "5569295"   "5573520"   "5591223"   "5593417"   "5603721"   "5632840"   "5645559"   "5649950"   "5649977"   "5653727"   "5653747"   "5667523"   "5683453"   "5693085"   "5700286"   "5713949"   "5718973"   "5723003"   "5728131"   "5728158"   "5735892"   "5735893"   "5738674"   "5749880"   "5755770"   "5755774"   "5766238"   "5769884"   "5810870"   "5824037"   "5824043"   "5824046"   "5824054"   "5843161"   "5843166"   "5849037"   "5851232"   "5876448"   "5928279"   "6004348"   "6015431"   "6042605").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/06/24 11:35
L9	34	("5728150" "5749920" "5769885"  "5800518" "5824039" "5961548"  "6210429" "6398803" "5104399"  "5209731" "5419324" "5609625"  "5662700" "5669932" "5669936"  "5676697" "5723004" "5855600"  "5984955" "5256150" "5395349"  "5397345" "5484418" "5489295"  "5628783" "5653697" "5693083"  "5697971" "5755735" "5782909"  "5824044" "5910144" "5935122"  "5957973").PN.	US-PGPUB; USPAT	OR	ON	2005/06/24 11:41

L10	362	(623/1.35).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/06/24 13:09
L11	226	10 and (@ad<"19991118" or @rlad<"19991118")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 13:28
L12	41	grommet with graft	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 13:18
L13	25	12 and (@ad<"19991118" or @rlad<"19991118")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 13:22
L14	0	623/1.1,1.11,1.13,1.14,1.35,1.39, 1.44,1.23,903	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 13:23
L15	3723	((623/1.1,1.11,1.13,1.14,1.35,1. 39,1.44,1.23,903) or (606/108)). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/06/24 13:23
L16	334	15 and @pd>"20030501" and (@ad<"19991118" or @rlad<"19991118")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/24 13:29

US-PAT-NO: 6071307

DOCUMENT-IDENTIFIER: US 6071307 A

TITLE: Endoluminal grafts having continuously  
curvilinear wireforms

----- KWIC -----

Detailed Description Text - DETX (13):

It will be appreciated that the pliable tube graft 22 may be formed of any suitable material, including but not limited to woven polyester, expanded polytetrafluoroethylene (ePTFE), etc. In the exemplary embodiment shown in FIGS. 1-3 and 5-6, the tube graft 22 is formed of woven polyester and the individual ring members 10 are threaded through slits 40 formed in the tube graft 22 such that the ring members 10 will be held in substantially fixed positions within the tube graft 22. The ring members 10 may be unconnected to one another other than by way of their common attachment to the pliable tube graft. On the other hand, if desired, they may be attached to one another other than by way of their common attachment to the pliable tube graft. This mode of construction of the endoluminal graft 100 is generally in accordance with that described in U.S. Pat. No. 5,782,904 to White et al., which is incorporated herein by reference. Of course, other types of attachments of the ring members 10 to the tube graft 22 are within the scope of the present invention.

DOCUMENT-IDENTIFIER: US 20010032009 A1

TITLE: Partial encapsulation of stents

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Detail Description Paragraph - DETX (6):

[0024] A second embodiment of the present invention can be seen in FIGS.

4-6. Instead of having a "lacey" graft structure, a slitted outer sleeve is used to provide partial encapsulation of the stent, the slits providing flexibility to the structure, allowing the stent to expand and retract more readily. In FIG. 4, four longitudinal slits 52 run the length of the stent, leaving 5 to 10 mm of uncut sleeve at the ends. The slits are formed at 0.degree., 90.degree., 180.degree., and 270.degree., and are oriented to pass over a peak portion of each zigzag ring stent 30 (FIG. 6). FIG. 5 shows circumferential slits 62, wherein slits are cut circumferentially around the sleeve 60 at spaced intervals, preferably to coincide with a stent ring. At each radial section, two slits are cut around the circumference at evenly spaced intervals. In a first radial section, the slits span from 0.degree. to 90.degree. and from 180.degree. to 270.degree.. Each successive radial section has a pair of slits which are offset 90.degree. from the previous pair. Thus, a second radial section will have slits spanning from 90.degree. to 180.degree. and from 270.degree. to 0.degree.. Beside the configurations shown in FIGS. 4 and 5, a number of other slit configurations are possible, including diagonal and sinusoidal as will be appreciated by one skilled in the art. As shown in FIG. 6, a sleeve 70 is placed over the ring stents 30 and the underlying tubular graft 20 to form a new structure 80. The longitudinal slits 72, which are cut into sleeve 70, differ from the slits 52 shown in

FIG. 4 in that they do not span the length of the structure 80 and are staggered around the circumference of the sleeve 70. Ideally, the slits are aligned over the peaks in the zigzag ring stents 30. Once the slits 72 are cut into the sleeve 70 using any of the known methods, the structure 80 is exposed to heat and pressure, such as that caused by wrapping with PTFE tape and heating in an oven, thereby causing the ePTFE regions of the slitted graft 70 to fuse or laminate to the tubular graft 20. The slits 72 in the slitted outer sleeve 70 can be formed by using a CO.sub.2 laser, razor blade or any other suitable technique known in the art. The slits enhance the flexibility of the encapsulated structure and allow radial expansion without tearing of the ePTFE. In addition, a plurality of slits help the expanded graft to grip onto the vessel wall. This is particularly important where an encapsulated stent graft is spanning a region of damaged or weakened vessel as in an aneurysm. Further, during the healing process tissues readily grow into the slits further anchoring the graft to the vessel wall.

Detail Description Paragraph - DETX (7):

[0025] An advantage that cutting slits into an ePTFE sleeve offers is that it is somewhat easier to manufacture than is the "lacey" graft. Because no material is removed the sleeve is somewhat stronger than a "lacey graft". There are a multitude of configurations possible, including cutting the slits in asymmetric fashion to achieve desired results, such as using radial, longitudinal and diagonal cuts simultaneously. Moreover, a greater number of slits can be cut into a region of the structure in which greater expansion is desired.

Claims Text - CLTX (4):

3. The radially expandable reinforced vascular graft of claim 1, wherein

said gaps comprise spaced apart slits in said second expanded polytetrafluoroethylene layer.

Claims Text - CLTX (5):

4. The radially expandable reinforced vascular graft of claim 3, wherein  
said slits are oriented longitudinally.

Claims Text - CLTX (6):

5. The radially expandable reinforced vascular graft of claim 3, wherein  
said slits are oriented circumferentially.

Claims Text - CLTX (19):

18. The radially expandable reinforced vascular graft of claim 17, wherein  
said slits are oriented longitudinally.

Claims Text - CLTX (20):

19. The radially expandable reinforced vascular graft of claim 17, wherein  
said slits are oriented circumferentially.